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Practice Exams

CERTIFICATION 2 IN 1 BOOK
SIMPLIFIED STUDY GUIDE
EIGHTH EDITION EXAM N10-008

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Practice Exams

1. To speed up a laptop, you have a request from a client for the following upgrades: upgrade RAM to 8GB and replacing the existing 500GB hard disk with a 1TB SSD.

   Which of the following should you do FIRST before you can quote a price and timeframe for this job?

A. PRICE COMPARISON for SATA and NVMe 1TB SSD.

B. Identify the location of the drive bay.

C. Review the contents of the service manual.

D. Determine amount and size of memory modules already installed.

1. A client has requested your expert advice on a gaming laptop with a 15-inch display that will cost about $1,400. Which of the following screen technologies would be the BEST choice for this user?

A. OLED

B. VA

C. TN

D. IPS

1. A client is generally satisfied with the thin and light laptops in use by her sales force, except that they need touch screens for more interactive presentations. Which of the following is the BEST recommendation for this client?

A. Replace the display panels with touch-screen versions.

B. Purchase styluses for use with the existing laptops.

C. Recommend the client never buy laptops from that manufactureragain.

D. Work on a schedule for replacing laptops with touch-screen versions.

1. Your client is asking for your help in deciding between two similar laptop computers. Laptop 1 has a Type-C port according to the marketing literature, while Laptop 2 has a USB 3.1 Gen 2 Type-C port according to its marketing literature. The client needs 10Gbps speed to support an additional display and highspeed USB SSDs connected to a Type-C docking station. Which laptop should you recommend, based on the marketing literature?

A. You don't know how fast either laptop's USB Type-C port is, so either one will do.

B. Laptop 1's Type-C port is faster than Laptop 2's, so you should recommend Laptop 1.

C. Laptop 2's USB Type-C port runs at 10Gbps, but you don't know how fast Laptop 1's USB Type-C port is. Recommending Laptop 2 is the safe choice.

D. Both laptops have the same-speed port but aren't labeled the same. Time to flip a coin?

1. Your client has asked you to buy charging/sync cables for their fleet of current Android and iOS smartphones. These cables will be used with laptops that have only USB-C ports. Identify these connectors and specify which ones to look for when you are shopping.

   In the following table, identify the USB-C and Lightning connectors as well as the other connectors shown. The Android charging cables will have USB-C connectors at both ends and the iOS charging cables will have a USB-C connector at one end and Lightning at the other.

   The connector types are shown in the first column. Identify each connector type in the second column.

Cable ends	Connector Type
A.	

B.

C.

D.

1. Your client is using a Bluetooth speaker with two different computing devices. She calls you because after using the device with her desktop, she was unable to use it with her smartphone, but a new Bluetooth headset does work with her smartphone. Which of the following is the BEST answer as to why the user can't use her speaker with her smartphone?

A. The smartphone's Bluetooth radio has stopped working.

B. The desktop computer needs to shut off its Bluetooth radio to enable the Bluetooth device to connect with another device. C. The speaker is turned off.

D. The Bluetooth device should be replaced under warranty.

1. Your client is planning to use Google Workspace on a 45-minute flight to prepare his presentation after charging his laptop all day. The presentation will be given within a half-hour of arrival, and very little has been completed yet. Which of the following problems could make the presentation preparation difficult?

A. Running out of power

B. Airplane mode

C. Single-screen display

D. None of the above

1. You are researching the electronic services offered by a bank that your company will begin using next month. You want to make sure that web-based banking users make secure connections to the bank server. Which one of the following protocols would be most appropriate for this use?

A. SSH

B. HTTP

C. HTTPS

D. FTP

1. You are having a discussion with a new hire in your department. The new hire asks you this question: "Which is better, TCP or UDP?" Which of the following is the BEST answer?

A. TCP because it guarantees delivery.

B. UDP because it is faster.

C. TCP or UDP; it makes no difference.

D. TCP or UDP are both important because they do different jobs.

1. Your client has been using POP3 email for several years when she used only a desktop computer. Now, your client has switched to IMAP, but her email client cannot connect to her email box. Her other network and Internet apps work properly. Which of the following is the MOST LIKELY reason for the problem?

A. Her email client must be upgraded to use IMAP.

B. She must buy a subscription to use IMAP.

C. She must delete all of her POP3 email first.

D. She must reconfigure her email client to use the correct ports and servers for IMAP.

1. Your client has been receiving DNS errors frequently. After consulting with you and changing his DNS servers, he is still getting DNS errors on his previous lookups, but new websites are resolving (being translated from URL to IP address and opening) properly. What is the BEST suggestion to fix this problem?

A. Reinstall the DNS server on the network.

B. Flush the DNS cache.

C. Stop using DNS.

D. Switch back to the original DNS servers.

1. A network with multiple servers has two problems: uneven server utilization and excessive numbers of outbound requests from the network for the same Internet content. Which two of the following will help improve network performance?

A. Load balancer

B. SCADA

C. Web server

D. Proxy server

1. Which of the following is most likely to include some IoT devices?

A. Fileshare server

B. SCADA

C. Spam gateway

D. Authentication, authorization, and accounting (AAA)

1. Your client has been reading about the advantages of IPv6 and wants to start using it. However, when she runs ipconfig /all, she sees only an IPv6 address that starts with fe80, and when she checks her public IP address, it only shows an IPv4 address. What is the reason? Select the best answer from the following:

A. fe80 indicates that IPv6 has failed.

B. A link-local address can't join an IPv6 network.

C. The ISP doesn't support IPv6 yet.

D. She needs to upgrade her network card drivers.

1. A co-worker has just lost Internet connectivity. However, he can still open folders on the network and print to the multifunction printer/scanner/copier/finisher device down the hallway. You ask him to run ipconfig /all to see the current IP address, and it comes up as 169.254.255.6. Which of the following best explains what is going on?

A. The network is broken.

B. The company didn't pay its ISP this month.

C. The DNS server has failed.

D. The DHCP server has failed.

1. Your client has decided to create a second network in her office building for "hoteling" clients who show up occasionally to avoid potential security risks for her own company's network. Which of the following should you recommend to do this?

A. Virtual private network

B. Router

C. Virtual LAN

D. DHCP

1. Your client has been having a lot of problems with email spam and bots. Which of the following DNS records need to be changed to help fight these threats?

A. DHCP lease

B. TXT record

C. A record

D. AAAA record

1. Your client has decided it's time to connect networks in satellite offices around the city. Which of the following are necessary to make this happen?

A. Using a WISP to set up the connection B. Adding a SAN

for storage

C. Using a PAN to connect the computers

D. All of the above

1. A client of yours has moved to a rural area and has asked for your assistance in selecting a broadband provider. The maximum budget per month is $100, the customer needs fast speeds for gaming and video chatting, and the customer expects to download up to 150GB of data per month. The available options include the following:

A. WISP #1 (50Mbps download, unlimited data) $75/month

B. Satellite Internet (30Mbps download, 100GB high-speed data) $100/month

C. Cellular LTE service (25Mbps download, unlimited data) $60/month

D. WISP #2 (75Mbps download, unlimited data) $90/month E. Basedon these factors, as well as what you know about the service types, which would you recommend?

1. During the laptop RAM upgrade process (goal: 8GB per system), you determine that some of the computers have 2x2GB SODIMM RAM modules for a total of 4GB onboard, while others have 1x4GB SODIMM RAM modules for a total of 4GB onboard. All systems have two SODIMM sockets. All of the 4GB memory and 2GB memory have the same form factor (DDR3 SODIMM) and timing. There are 10 systems with 1x4GB modules, and 20 systems with 2x2GB modules. Which of the following purchases will provide 8GB of identical RAM per system without considering spares?

A. Buy 30 1x4GB modules. B. Buy 50

1x4GB modules. C. Buy 60 1x4GB

modules.

D. Buy 10 1x4GB modules.

1. After a break-in and questions about security after working hours, your client has asked you to help add security features to their network. The client has software firewalls running on all computers and several unused Ethernet ports on outside walls. Which of the following recommendations would provide improved security? (Choose all that apply.)

A. Add power next to each Ethernet port to support cameras.

B. Use a PoE switch to provide power to cameras.

C. Add a hardware firewall to the network between the server and the Internet.

D. Add a hardware firewall to the network between the server and its clients.

1. A friend of yours has asked you to help clean out a closet full of miscellaneous network hardware. Your friend is hoping to find a Gigabit Ethernet switch, a DSL modem, and an access point. Which of the following devices can your friend use? (Choose all that apply.)

A. This item is marked 10/100 Ethernet switch.

B. This item is marked 10/100/1000 Ethernet switch.

C. This item has an RJ-11 port, two antennas, and a four-port RJ-45switch.

D. This item has an RJ-45 port and two antennas.

E. This item has an RJ-45 port and a four-port RJ-45 switch.

1. You are helping a friend set up a wireless network using a surplus 802.11n (Wi-Fi 4) router. Your friend wants to use Channel 149 because there is no wireless network using it. However, only channels 1–11 can be detected by the router. What is the reason?

A. The router is defective and should not be used.

B. The manufacturer must provide a special code to enable three-digit channels.

C. 802.11n routers are not required to support channels above 11.

D. Your friend needs to attach another antenna to the wireless router.

1. Your client wants to use Bluetooth interfacing for a printer, a keyboard, and a headset for listening to music. The computer doesn't have on-board Bluetooth, so purchasing and installing a USB-Bluetooth adapter is necessary. The headset recommends Bluetooth 5 or above, while the printer and keyboard don't specify a particular Bluetooth version. Which of the following is the best strategy to follow?

A. Buy two Bluetooth adapters: Bluetooth 5.1 and an older Bluetoothversion.

B. Buy three Bluetooth adapters, one for each device.

C. Buy a Bluetooth 5.1 adapter

D. All of the above strategies will work equally well.

1. Your client is asking for your recommendations for troubleshooting the company network. The company network is using a mixture of wired and wireless clients, and cabling is provided and maintained by the building management. Which of the following network tools should be recommended? (Choose all that apply.)

A. Loopback plug

B. Network tap

C. Wi-Fi analyzer

D. Crimper

1. A different client is planning to replace its obsolete CAT5 cable with CAT6 cable and has purchased a spool of the cable. Which of the following items does this client also need to purchase for this job? (Choose all that apply.)

A. CAT6 connectors

B. Coax crimper

C. TP crimper

D. Coax wire stripper

1. Your client has asked you to add a second 4K display to a PC. The PC currently connects to the first 4K display with DisplayPort (DP). The new 4K display has DP-in, DP-out, and HDMI ports. The PC has a single DisplayPort and two HDMI ports. The cable run between the PC and the existing display is 50 feet, and the new display will be located directly beside the existing display. The second display is already paid for, but you need to select the connection type. The budget for the connection is $50. Which of the following is the BEST recommendation for making this work?

A. Buy a 60-foot 4K HDMI cable to allow sufficient slack.

B. Daisy-chain the second 4K display to the first 4K display with DPor mDP cables.

C. Daisy-chain the second 4K display to the first 4K display with HDMI.

D. Inform the client that you need to purchase a second graphics card and cable.

1. Your company has had a cable failure on an existing 100BaseT (Fast Ethernet) network segment. Plans are to upgrade this segment to Gigabit Ethernet in the next 12 months. Keeping both current and future needs in mind, which of the following is the BEST solution?

A. Replace the current cable with a CAT5 cable now and run CAT5ealongside it for future use.

B. Replace the current cable with a CAT5e cable.

C. Replace the current cable with an RG6QS cable.

D. Replace the current cable with a CAT6 cable.

1. Your client is asking for your help in selecting memory upgrades for their desktop computers. All of the computers use DDR4 memory, but there are four different models in the fleet. The Internet connection at the client site is out for a few days, which is why the upgrade has been scheduled. Of the following strategies, which can best help you determine the upgrades that are necessary?

A. Open one system at random and check its memory size, type, andconfiguration.

B. Watch all of the computers when they start up and look for memory size information.

C. Open up one system of each model and check its configuration.

D. Run MSInfo32.exe on each system.

1. Your client has asked you to perform a custom desktop build using, as much as possible, leftover parts from previous system upgrades that took place in 2020 or earlier. Some of the parts you can choose from include A motherboard with 240-pin memory slots and an installed AMD CPU A motherboard with 288-pin memory slots and an installed 7th generation Intel CPU Two matched DDR3 4GB modules Three DDR4 modules, two 8GB, and one 4GB Which of the following builds are most likely to work from the facts listed?

A. 240-pin motherboard with all DDR4 modules

B. 288-pin motherboard with any or all DDR4 modules

C. 288-pin motherboard with pair of DDR3 modules

D. 240-pin motherboard with pair of DDR3 modules

1. You have the following 2TB drives:

1. 7200 RPM SATA
2. SSD SATA 2.5-inch
3. SSD SATA M.2
4. SSD NVMe M.2

You have three desktop systems:

- System X has an available SATA host adapter on the motherboard
- System Y has an available M.2 interface with an M key
- System Z has an available M.2 interface with a B key

Which drive provides the best performance in System X? _____

Which drive provides the best performance in System Y? _____

Which drive provides the best performance in System Z? _____

1. You have 10 systems that need RAID drive installations. Five of these support RAID 0 and 1 only, while the other five support RAID 0, 1, and 10. To provide maximum safety and best performance for all systems and provide RAID array sizes of at least 4TB each, how many identical drives are needed? How large should each drive be? Do not calculate for spares, as they are provided for in a separate budget. Choose the BEST answer from the following possibilities.

   - 30 drives, 4TB each
   - 40 drives, 8TB each
   - 30 drives, 2TB each
   - 20 drives, 3TB each

1. Your client has located several computer components in a closet and wants you to build a PC using these parts:

› AMD CPU

› Desktop motherboard with a 2017-vintage LGA CPU socket

› PCI video card

Which of the following is the most accurate answer to your client's request?

A. The PCI card will plug into the motherboard.

B. An adapter is needed to enable the CPU to work in the motherboard.

C. These parts can work in a single PC.

D. These parts must be used in separate PCs.

1. Your client needs to add four large-capacity external drives to a media development PC. The drives are USB 3.2 Gen 1 and Gen 2 hard disk drives and SSDs. When the drives were plugged into a USB 3.2 Gen 2 hub, the drives were too slow because they were sharing a single USB controller chip. You recommend a USB 3.2 Gen 2 card with four separate USB controllers (one for each port). However, this card is a PCIe ×4 card, and the computer has a PCIe ×8 and a PCIe ×1 slot available. What should you do?

   A. See if a PCIe ×8 card is available. B. See if a PCIe

   ×1 card is available.

   C. Use the PCIe ×8 slot for the x4 card.

   D. Tell the client to get a new motherboard that includes aPCIe ×4 slot.

1. You are helping a client troubleshoot a Windows 10 system that will not start from the system drive. After doing some research, you determine that the best course of action is to start the system from a diagnostic USB drive that contains a Linux distro. Which of the following BIOS/UEFI settings will make this EASIEST to do?

A. Change boot order

B. Enable TPM

C. Override boot order

D. Enable Secure Boot

1. Your client wants to upgrade her fleet of Windows 10 PCs to run Windows 11. All of them were purchased with TPM installed. However, some are blocking upgrades to Windows 11. Which of the following could cause this issue? (Choose all that apply.)

A. TPM version installed on some systems is TPM 1.2.

B. TPM was not enabled on some systems.

C. Windows 10's TPM is not supported in Windows 11.

D. Secure Boot is not enabled on some systems.

1. Your client has several four-year-old desktop PCs that are being upgraded with more powerful PCIe video cards and higher performance CPUs. Both draw more power than the current components. The current power supply is a 550-watt power supply that provides 44Amps of 12V power (528 watts). Which of the following would provide at least 800 watts of 12V power and sell for the lowest price?

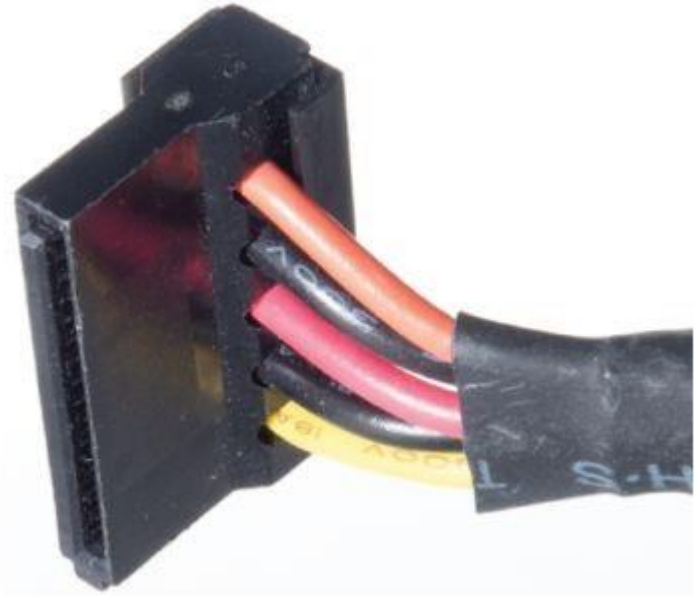
   › Power Supply A: 58Amp 12V, $85

   › Power Supply B: 70Amp 12V, $99

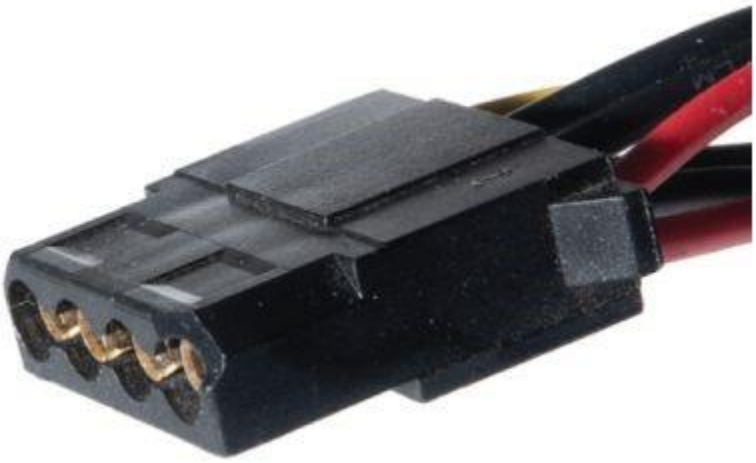
   › Power Supply C: 64Amp 12V, $94

   › Power Supply D: 78Amp 12V, $109

1. You are preparing to install a new high-performance PCIe video card into a computer. Which of the following power leads are you most likely to need to connect to this card?



A



B

C

D

1. Your client has purchased an MFD but didn't use the software provided by the vendor to set up the device. Instead, he let Windows recognize the device and set it up. The copying feature doesn't work. What is the most likely place to start troubleshooting?

A. TEST THE SCANNER component.

B. Send back the MFD for replacement.

C. Install the software provided by the vendor.

D. Connect the printer to a USB port instead of the network.

1. You are assisting a user with print quality issues on her inkjet printer. She is attempting to print photos on glossy paper, but the results are streaky and the paper has too much ink on it. Which two settings does she need to check?

A. Duplex

B. Quality

C. Tray

D. Paper type

1. Your client is experiencing a lot of poor-quality printouts from a laser printer. It prints pages on standard copy paper that look OK until they are picked up, and then the print falls off the page. The toner cartridge and imaging drum check out OK. Which other component is likely to be the cause of the problem?

A. The rasterizer that creates the page in the printer

B. Not enough memory in the printer

C. Paper loaded upside down

D. The fuser

1. You have been asked to pick up some consumables for the office. The shopping list contains the following:

A. One spool each of TPA, ABS, and PETG filament in black, white,and blue

B. Cash register tape

C. Black ink cartridge

Choose the types of printers you are shopping for from the following list:

1. Laser

2. Inkjet

3. Impact

4. 3-D

5. Thermal

1. Your client needs to scale up its current IT facilities to handle an expected rush of sales for its new electronic widget. It needs to handle global orders after the latest World of Widgets trade show using its existing software. Which of the following cloud service model types would best meet this need?

A. SaaS

B. Rapid elasticity

C. IaaS

D. PaaS

1. Your company has just signed a contract with a cloud provider to enable field workers to automatically get updates to the current product catalog. Which cloud computing benefit will field workers be enjoying?

A. Rapid elasticity

B. File synchronization

C. Metered utilization

D. High availability

1. Your client is setting up an existing computer to be a virtual machine host for four 64-bit VMs, one running Windows 10, one running Windows 11, and two running Linux, all installed for testing purposes. Which of the following computers would be most suitable?

A. Four-core, eight-thread 3GHz CPU with 16GB RAM, 4TB RAID 1 onGigabit Ethernet

B. Eight-core, eight-thread 4GHz CPU with 32GB RAM, 2TB SSD onFast Ethernet

C. Six-core, 12-thread 3.7 GHz CPU with 64GB RAM, 8TB RAID 1 onWi-Fi 6

D. Two-core, four-thread 2.5GHz CPU with 8GB RAM, 1TB on Wi-Fi4.

1. Your client is partway through setting up a VMM but is not sure if the CPU has hardware virtualization enabled. Which of the following BIOS/UEFI settings need to be enabled on an Intel CPU?

A. VT-Q

B. SVM

C. Secure Boot

D. VT-x

1. You are working with a user who was experiencing an issue with displaying computer-aided design (CAD) graphics on her computer. You replaced her monitor and performed some tests that showed that the problem is resolved and the user has full system functionality. What should you do next?

A. Document your findings

B. Close the ticket

C. Conduct additional testing

D. Escalate to senior technicians

1. You are helping a user troubleshoot a problem printing to a new all-in-one (AIO) device that was recently installed. The user is unable to print any documents to that printer but is able to print to other devices on the same network. You have researched the problem on the Internet and in your organization's knowledge base (KB), and that research is pointing you to several possible issues. You are working to identify which issue is the most likely culprit. What step are you taking in the troubleshooting process?

A. Verify full system functionality

B. Identify the problem

C. Implement the solution

D. Establish a theory

1. Your client is experiencing frequent system crashes that happen with a mix of applications and tasks. An examination of the computer reveals that there are four possible causes:

A. Memory issues

B. Overdue application and operating system updates

C. Clogged air intakes

D. Power supply overloaded

E. The client is on a deadline (of course!). Which should you addressFIRST?

1. You are visiting a client when you notice a desktop computer in a nearby cubicle is making a grinding noise. You mention this problem to your client, and she asks you to take a look. After a quick look at the computer and reviewing the documentation, you realize that the grinding noise is coming from the bottom rear of the computer and that the computer uses an SSD for storage. Which of the following is the most likely source of the noise?

A. Case fan

B. Power supply fan

C. HDD

D. CPU fan

1. Your client is using a RAID 1 array for a data drive and a RAID error message is displayed. What should the client do first?

A. Shut down the computer with the RAID array.

B. Restart the system to see if the error persists.

C. Replace the host adapter.

D. Capture all error messages from the operating system or RAIDarray.

1. You are installing a new SATA 8TB internal drive as a data drive. The drive will hold critical data and will be backed up with both cloud and local storage. Which of the following would you recommend for early warning of SMART drive failure?

A. Run error-checking regularly.

B. Install the drive vendor's diagnostics utility and run it regularly.

C. Run SMARTST.EXE on each startup.

D. Replace the power supply.

1. Your client occasionally uses an HDTV for classroom presentations. Normally everything works fine, but she has a new laptop and video cable, and when she connected it, there was no picture on the HDTV. Which of the following is the FIRST item to check?

A. New laptop has defective video port.

B. The video cable is defective.

C. Mirroring was not enabled.

D. The new laptop is using a different type of video cable.

1. Your friend has frantically called you with a problem: he can't get his brand-new PCIe graphics card to display anything. He upgraded an older system and had problems connecting the PCIe power lead to the card. When you arrive, you discover that he has inserted a six-pin PCIe power cable into the card that takes eight pins. Which of the following should you look for FIRST?

A. An eight-pin PCIe power cable

B. An adapter to turn a drive power cable into a PCIe power cable

C. A different slot for the PCIe card

D. A replacement power supply

1. Your client has just dunked their water-resistant smartphone in the deep end of the pool. After checking the specifications, your client remembers that the phone has an IP67 rating. Which of the following BEST describes your client's situation?

A. The phone will be fine.

B. The phone is ruined.

C. The phone should be dried out immediately.

D. The phone should be replaced under warranty.

1. Your client is using a Windows computer with a touch screen that is not registering touches consistently. After verifying that the problem is the same whether or not a stylus is used, you recommend checking in which of the following locations in Control Panel or Settings for the calibration settings?

A. East of Access Center

B. Tablet PC Settings

C. Mouse

D. Pen and Touch

1. The laser printer in your office is making a grinding noise. What should you do FIRST?

A. Shut down the printer.

B. Listen to the printer to determine where the noise is coming from.

C. Replace the imaging drum/toner cartridge.

D. Replace the fuser assembly.

1. Your client calls you because the multifunction device is producing speckled pages. Which question should you ask FIRST to help troubleshoot the problem?

A. Are all printouts affected or only printouts made when copying adocument?

B. Is this a laser or inkjet device?

C. How old is the toner cartridge or imaging drum?

D. Does the printer use an ink cartridges or ink tanks?

1. Your client has a Gigabit Ethernet network that is connected using CAT5e cabling. Some of the network cabling is running close to a flickering fluorescent light fixture,

and users are complaining about slow network performance. Which of the following should you try FIRST to improve performance?

A. Replace UTP cable with STP cable. B. Replace STP

cable with UTP cable.

C. Enable QoS in the router.

D. Repair the fluorescent light fixture.

1. Your client's small-office network has limited connectivity. Which of the following router functions has stopped working?

A. QoS

B. LSO

C. DHCP

D. IPv4

1. When you're installing a new hardware device on a Windows 10 Pro system, what must be present before the OS will support the device?

A. USB hub

B. Signed device driver

C. BIOS/UEFI support for the device

D. PnP support

1. Which one of the 64-bit Windows 10 editions does not support up to 512 GB of primary memory?

A. Enterprise

B. Pro

C. Home

D. Pro for Workstations

1. In a Windows environment, what is a domain?

A. A logical grouping of network servers, nodes, and resources.

B. A peer-to-peer network

C. A grouping of workstations from remote networks

D. A workgroup

1. Which Windows 10 edition is limited to settings and configurations for a local computer only using the Group Policy Editor?

A. Pro

B. Enterprise

C. Pro for Workstations

D. Home

1. What is the type of upgrade process most commonly used to apply new features to a supported Windows edition?

A. Feature update

B. Cumulative update

C. In-place upgrade

D. Servicing stack update

1. What Windows command prompt command verifies system files, folders, and paths and replaces corrupt versions?

A. chkdsk

B. gpupdate

C. sfc

D. ipconfig

1. You are unable to remove all the contents of an existing hard disk using Disk Management. Which command should you use instead?

A. format

B. diskpart

C. gpupdate

D. gpresult

1. A user calls you to ask for help with her network connection. To find out what her network settings are, which of the following commands should you run?

A. ping

B. netstat

C. net use

D. ipconfig

1. You need to use ping to check the connectivity to network server 164.172.1.150, also known as MyServer.net. Which of the following is the correct syntax?

A. ping //MyServer.net

B. ping 164-172-1-150

C. ping MyServer.net

D. ping theserverforthisnetwork

1. You are providing telephone support to a user named Miranda who needs to access her personal folders at a command prompt. From her Users folder, which of the following commands would she need to use to get to her personal folders?

A. cd \Miranda

B. Miranda.exe

C. ls Miranda

D. cd Miranda

1. 1. Some Task Manager tasks or services can be executed from a command prompt. Which of the following commands can be used to execute or kill a task? (Choose two.)

A. net start <service>

B. net stop <service>

C. net kill <service>

D. net execute <service>

E. taskstart <service>

1. Which of the following is not one of the four sections of the Event Viewer?

A. Summary of Administrative Events

B. Recently Viewed Nodes

C. Log Summary

D. Future Events

1. Two primary sections are available when the Local Group Policy Editor first opens: the Computer Configuration and which of the following?

A. User Configuration

B. Local Configuration

C. Group Configuration

D. Network Configuration

1. What system utility should be used to investigate a failed device that is causing problems for a Windows system?

A. Device Manager

B. Configuration Manager

C. System Information

D. Disk Management

1. Which of the following is not one of the five main keys of the Windows Registry?

A. HKEY_CLASSES_ROOT

B. HKEY_CURRENT_USERS

C. HKEY_LOCAL_MACHINE

D. HKEY_USERS

E. HKEY_CURRENT_CONFIG

1. What Control Panel option is used to configure the Internet security zone for a given scenario?

A. System

B. File Explorer Options

C. Security Options

D. Internet Options

1. Which Control Panel option do you select to access the media streaming settings?

A. Internet Options

B. AutoPlay

C. Network and Sharing Center

D. Sync Center

1. What Control Panel option provides for centralized viewing and management of monitors, printers, and peripheral devices?

A. Devices and Printers

B. Printers and Devices

C. Device Manager

D. Programs and Features

1. What Windows 10 applet allows a user to modify a computer's tools, features, and settings?

A. Utility Manager

B. Control Panel

C. System Information

D. MMC

1. Windows 10 Power Settings are configured from which category of the Control Panel?

A. Appearance and Personalization

B. Clock, Language, and Region

C. User Accounts

D. System and Security

1. A customer is having trouble reading the text on their computer screen because it is too small. What setting in the Settings Display app can you use to adjust the size of the text, apps, and other items?

A. Scale and layout

B. Display resolutionC. Display orientation

D. HDR color 2.

1. Which of the following is not a setting that can be configured on the System settings Display option?

A. Brightness

B. Background tint

C. Scaling

D. Resolution

E. HDR color

1. 3. You are setting up a new mobile PC for an in-house client and need to configure the settings that personalize the PC's display, sound, and battery. What section of the Settings app should you use for these settings?

A. Display

B. Personalization

C. System

D. Devices

1. The Diagnostics & Feedback settings are found in which section of the Settings app?

A. Privacy

B. Accounts

C. Devices

D. Optimization

1. On what Windows 10/11 app are the settings for the image or color of the Lock Screen found?

A. System

B. Apps

C. Control Panel

D. Settings

1. A user needs to access a network printer but only knows the network printer's IP address. What should you tell the user?

A. Find the printer brand and model.

B. Use a wireless connection to the printer.

C. The IP address is the only information needed to use the printer.

D. Find out the host name.

1. A Windows user has just returned from a trip during which she connected to the Internet via Wi-Fi networks in coffee shops and airport lounges. The user wants to connect to the new wireless LAN to print a report to a network printer she has used before, but she can't connect to the printer. Which of the following is the most likely cause?

A. Windows Firewall is set for a private network.

B. Windows Firewall is set for a public network.

C. The user must reinstall the printer driver.

D. A printer app can't work on a wireless LAN.

1. You are performing telephone support with a user who has lost his Internet connection on a SOHO network. After running ipconfig, the user reports his IP address as 169.254.0.23. Which of the following should you check first?

A. Broadband modem

B. Network switchC. Network hub

D. Network router

1. A client says she needs to access an important document that was sent to her over the Internet by one of her clients, but no matter how many times the document has been sent, it never arrives on her computer. What should you check first when resolving this problem?

A. Network adapter

B. Network router

C. Network firewall rules

D. Proxy server

1. A company salesperson is telecommuting from home three days a week. She is setting up a home office but cannot connect to any IP address beyond her home network's router. She ran an ipconfig command and learned that the IP address assigned to her computer is 169.254.0.1. What do you believe to be the source of her problem?

A. No connection to the DHCP server or DHCP server is faulty.

B. The network adapter is faulty.

C. The default gateway is configured incorrectly.

D. The proxy server settings are incorrect.

1. A user is trying to install a 64-bit Windows app on a system running a 32- bit version of Windows. Which of the following recommendations should you make?

A. Use the Program Compatibility Wizard.

B. Create a Program Files (x64) folder for the program.

C. Use the Compatibility tab.

D. Install a 32-bit version of the app.

1. You are preparing a laptop for a trip that involves 12 hours of flight time. You have purchased a software key card from a retail store to use on the trip. When should you install the app?

A. On the flight

B. Before leaving for the airport

C. While waiting for the flight

D. Any of the above are acceptable

1. Your department is preparing to evaluate a new app that has a minimum requirement of 4 GB of RAM but recommends 8 GB of RAM. The systems you want to use have 4 GB of RAM and are expandable to 16 GB. Which of the following will help you evaluate the software most fairly?

A. Set up a large pagefile on each system.

B. Install the software on all computers and see how slow it runs.

C. Install upgrades to 8 GB on some systems and install the app onall systems for comparison.

D. Look for software that runs with 4 GB of RAM.

1. Although your department is now running Windows 10, it relies on an application made for Windows 7. It doesn't run properly on Windows 10. Which of the following could be used to help it run correctly?

A. Device Manager

B. System Properties

C. Compatibility tab

D. Virtual memory

1. Your employer wishes to install a multifactor authentication (MFA) system to control physical access into the company's IT center. Which of the following methods would be perhaps the most convenient way for employees to learn and work with the new system and also be the most secure?

A. One-time passwords (OTPs)

B. External hardware token (key fob)

C. Password

D. Issue keys for new locks on the IT doors.

1. What type of OS is more robustly configured than a home OS and better serves the operating needs of nodes on a centrally managed network?

A. Home workstations

B. Business workstations

C. Network routers

D. Smartphones and tablets

1. You have been delegated the task of picking an operating system for the endpoint workstations of your company's LAN. You wish to ensure that the applications that run on this OS are compatible with the applications running on the networks of the company's product partners. What OS would you recommend?

A. Windows

B. Linux

C. macOS

D. Chrome OS

1. What is the operating system that the macOS is based on?

A. Windows

B. Android

C. UNIX

D. Chrome OS

1. Which of the following are the most popular OSs for smartphones and tablet PCs? (Choose two.)

A. Windows Mobile

B. Google Android

C. Apple iOS

D. Linux Mobile

1. Which of the following are the most common file systems for the Linux OS? (Choose two.)

A. exFAT

B. ext3

C. NTFS

D. ext4

E. APFS

1. You are upgrading a PC from Windows 10 to Windows 11 and have executed the Microsoft PC Health Check, which indicates that the hardware requirements for Windows 11 are met. What should now be the next step in the process?

A. Proceed with the upgrade.

B. Remove all unsigned drivers.

C. Back up all user data and settings.

D. Run the PC Health Check again to verify its results.

1. Which of the following is required for a network boot?

A. USB boot media

B. PXE-compatible network adapter

C. Remote network installation server

D. BIOS/UEFI boot priority for a flash memory device

1. What is the form of copy of an existing installation saved as one file?

A. Image

B. Full copy

C. Incremental backup

D. Differential backup

1. What type of partitioned disks have the tangible limits of capacity not larger than 2.2 TB and no more than four partitions?

A. MBR

B. GPT

C. GUID

D. FAT32

1. What type of disk partition is assigned a drive letter such as C:, E:, or X:?

A. Extended

B. Physical

C. Logical

D. Virtual

1. A macOS user needs to search for a specific file. Which utility should he use?

A. Spotlight

B. Finder

C. Remote Disk

D. Dock

1. A macOS user needs to stop an unresponsive app. What macOS feature can be used to stop the application?

A. Finder

B. Force Quit

C. Terminal

D. Mission Control

1. What is the macOS app used to create backups and snapshots?

A. Time Machine

B. Spotlight

C. Dock

D. Disk Utility

1. Which of the following is a macOS scripting tool used to create scripts used for running an app in background?

A. Time Machine

B. Dock

C. Spotlight

D. launchd

1. What macOS app stores passwords and account details?

A. Dock

B. Finder

C. Keychain Access

D. iCloud

1. A Linux user is trying to update her system's apps with the command apt-get update, but the command doesn't work. What did the user forget to do? A. Restart in Safe Mode.

B. Run the command from Terminal.

C. Run the command as the root user with sudo.

D. Create an image backup first.

1. A Linux user needs to stop a process but doesn't know its PID. Which command from a Terminal command line would provide this information?

A. ifconfig

B. ps

C. ls

D. kill

1. A backup script created on a Linux system is to run at a particular time of the day. Which Linux command can be used to ensure this occurs as scheduled?

A. backup

B. cron

C. dd

D. grep

1. What Linux command can be executed from a Terminal command line to display the amount of free disk space available on a file system?

A. free B.

chkdsk

c. df

D. ls

1. What system protocol can be used to allow a Linux system to interact with a Windows system to share files and other resources?

A. apt-get

B. dig

C. Samba

D. top

1. Which of the following is a useful feature in the use of access control vestibules (or mantraps) and entry control rosters?

A. Key fob

B. Security guard

C. Biometric lock

D. Cable lock

1. An organization has contacted you for help in stopping security breaches on its servers. The latest breach involved the use of a flash drive to steal credentials. Which of the following is designed to stop this type of security breach?

A. Privacy screen

B. Server lock

C. Cable lock

D. USB lock

1. RFID, magnetic strip, barcode, and QR code technologies can all be used by which of the following?

A. Badge reader

B. Smart card

C. ACLs

D. Biometric lock

1. A Kensington lock connector is used by which of the following devices?

A. Door lock

B. USB lock

C. Cable lock

D. Biometric lock

1. A company wishes to allow its employees to connect their personal devices to its internal network. What software-provided management system should the company consider implementing?

A. Soft tokens

B. Biometric security

C. Mobile device management

D. Smart cards

1. If you log in to a server with your username and password, which type of authentication is being used?

A. Multifactor

B. TACACS+

C. Single factor

D. WEP

1. WPA3-Enterprise uses which of the following for authentication?

A. SAE

B. TKIP

C. AES

D. WPA2

1. What is the authentication technology used to authenticate a user web content request without needing to send a password over the Internet?

A. SAE

B. TACACS+

C. Kerberos

D. MFA

1. Entering a code sent to a device along with a user name and password constitutes which type of authentication?

A. RADIUS authentication

B. Multifactor authentication

C. Single-factor authentication

D. WEP

1. Which of the following statements is true of AES encryption? (Choose two.)

A. It features 128-bit, 192-bit, and 256-bit encryption.

B. It is easily defeated.

C. It is the strongest wireless encryption standard.

D. It is the weakest wireless encryption standard.

1. A client calls you for help: the company files are encrypted and they'll be deleted unless the company sends a payment in cryptocurrency. What type of attack has happened to your client?

A. Malware

B. Trojan

C. Worm

D. Ransomware

1. Instructing individuals in your company not to click URLs in suspicious e-mails is an example of what?

A. Social engineering

B. Paranoia

C. End-user education

D. Untrusted software

1. If anti-malware software is a second line of system defense, what would be an organization's first line of defense against malware and social engineering attacks?

A. Antivirus software

B. Third-party consultants

C. Risk assessment policies

D. End-user training and education

1. A company's electrical power costs have suddenly increased significantly without any major equipment changes to the system. What could one possibility be for this increase?

A. Hardware failures

B. Rogue cryptominers

C. Software failures

D. Faulty distribution equipment

1. Which of the following OSs provide some form of a recovery mode?

A. Windows

B. Android

C. macOS

D. All of the above

1. A client reports that the organization's wireless network is being flooded with pings and page requests far beyond normal limits. The pings and page requests are coming from a wide variety of locations. Your client is dealing with what type of attack?

A. DDoS

B. Impersonation

C. DoS

D. Social engineering

1. You receive an e-mail purporting to be from the head of IT that is asking you to install a piece of malware. Which type of attack

   is being used?

A. Impersonation

B. Spoofing

C. Evil twin

D. Brute force

1. Security cameras reveal that someone is walking by the server room and pulling reports out of the trash. What is going on?

A. Dumpster diving

B. Shoulder surfing

C. Phishing

D. Vishing

1. The same day that your accounting software vendor is informed of a security vulnerability, you discover it was used to attack accounts payable. What type of attack is being attempted?

A. Phishing

B. On-path

C. Zero day

D. Cross-site scripting (XSS)

1. The RADIUS authentication server on your wireless network has been hacked and a list of old passwords has been leaked. Although none of the passwords are current, the list could still be used for which of the following attacks?

A. Brute force

B. Whaling

C. SQL injection

D. Dictionary

1. You have been using a separate and unique login username and password for several different Microsoft applications, including Xbox Live. You learn that you can use just one login account for all Microsoft products. What is it?

   A. Administrator account

   B. Remote user account

   C. Microsoft account

   D. Guest account

1. A client has called you needing help to find BitLocker on a Windows 10 Home edition PC. The client wants to encrypt a hard disk drive and was unable to find it. What is your response to this client?

A. Set File Explorer to show hidden files.

B. Search the Web for how to edit the Registry.

C. Look in the PC's documentation.

D. BitLocker is not installed with Windows 10/11 Home editions.

1. Which one of the following is not currently a Windows 10/11 sign-in option?

A. Windows Hello

B. Security Key

C. Password

D. Picture Password

E. Spoken Password

1. What is the user sign-on type that authenticates a user only once on a device or network and allows access to multiple applications or services?

A. Windows Hello

B. SSO

C. Security key

D. Password

1. An administrator is suspicious that unknown and unsigned applications are being installed by a user on a network node. What UAC setting should the administrator use to block users from installing software on their computers?

A. Always notify me when

B. Notify me only when apps try to make changes to my computer(default)

C. Notify me only when I make changes to my computer

D. Never notify

1. You are considering using one of the following eight-character passwords. Which is the strongest password?

A. 12345678

B. 1Z$#7j!~

C. 867530900

D. My$$Name

1. Your client is being plagued by a series of brute-force logon attacks. Which of the following group policy settings would best help stop them?

A. Account Lockout Policy

B. Security Options

C. Password Policy

D. Logon Time Restrictions

1. Your department was recently attacked by malware that was automatically loaded from a consultant's USB drive when it was inserted for diagnostic purposes. Which of the following should be disabled?

A. Plug and Play

B. File Explorer

C. AutoPlay

D. BIOS/UEFI

1. You wish to prevent users from using the same password over and over. What setting do you need to configure to prevent the same password from being reused within a one-year period?

A. Enforce Password History

B. Maximum Password Age

C. Minimum Password Length

D. Relax Minimum Length Requirement

1. Data that is stored on a computer or mobile device, a database server, or an external backup medium is considered to be which of the following?

A. Data in transit

B. Data in use

C. Data in suspense

D. Data at rest

1. An Android phone with confidential company information was lost. The information on the phone began to be used for attacks on company resources, although the user had set up a passcode. Which of the following Android settings could have prevented attacks using the information in the phone? (Choose two.)

A. Remote wipe

B. Firewall

C. Device encryption

D. BYOD

1. A client is attempting to sign on to his iPhone but cannot remember the passcode. He has tried eight times and the wait time keeps getting longer between attempts. What would you advise him to do?

A. Keep trying to log in.

B. Stop trying until he can get back home and check to see if he hasthe information available there. C. Use a hacking tool.

D. Run antivirus.

1. You are part of a team developing a BYOD policy for smartphone usage. Which of the following topics is most likely

   to be part of the policy?

A. Approved case colors

B. Ownership of private data stored on the device

C. Ownership of charging cables

D. Ownership of company data stored on the device

1. What biometric method compares a camera-captured image of a user's face to an image previously captured from a scanned photograph and stored?

A. Facial recognition

B. Faceprinting

C. Image matching

D. Pattern matching

1. The Internet of Things (IoT) is a communications network of devices. What is the primary component in each device for its operations and communications?

A. Embedded device

B. Modem

C. Microcontroller

D. Integrated circuit

1. A 64-GB flash memory card contains confidential information. Which of the following methods ensures that data cannot be read from the card and that the card cannot be reused?

A. Drilling

B. Zero-fill

C. Drive wiping

D. Degaussing

1. After the completion of a government contact, your firm must prove that the media used to store data have been destroyed. Which of the following do you need?

A. Drill

B. Certificate of destruction

C. Shredder

D. Degausser

1. Your client is panicking because a disgruntled employee performed some type of command on an important hard drive before leaving the premises. Which of the following would make the data the most difficult to recover?

A. Standard format

B. Zero-fill

C. Drive wiping

D. Low-level format

1. You are in charge of a project to remove hard drives from endof-life systems and prepare them for donation to schools for reuse. You discover that one of your assistants is running the Format command on each drive before removing it. Which of the following is the best reaction to this discovery?

A. "Good job! No one can get to that data now."

B. "Did you use quick or standard format?"

C. "Using Format isn't drive wiping."

D. "You should be using a drill."

1. Your firm has a large amount of magnetic tape from old mainframe systems. Which of the following is the quickest way to render this tape unreadable?

A. Drilling

B. Zero-fill

C. Drive wiping

D. Degaussing

1. What settings on a new wireless router or AP should be changed immediately after installation? (Choose all that apply.)

A. Brand and model

B. Default administrator login name

C. Default administrator password

D. Location

1. Which of the following programs are you most likely to use when you set up your SOHO router?

A. Web browser

B. Paint program

C. FTP program

D. Word processor

1. What enables you to open a port in the firewall and direct incoming traffic on that port to a specific IP address?

A. Port forwarding

B. Screened subnet

C. Disabling ports

D. Changing channels

1. Which one of the following is not a role fulfilled by a screened subnet on an internal network?

A. Access router

B. Internal router

C. Perimeter router

D. WAN router

1. A local insurance agency wants to block both incoming and outgoing network traffic addressed to one or more specific IP addresses. What feature should the agency configure on its router or firewall?

A. DHCP

B. IP filtering

C. Encryption settings

D. Content filtering

1. A client downloaded a relatively unknown browser called WebWeave, which claims to provide higher security than other, better-known browsers, from a software download site called Apps2Bad.us. He says that since he installed the browser, he is unable to open files in his Windows User folder. What is likely contributing to this situation? (Choose two.)

A. A possibly untrusted site

B. Malware

C. Improper installation

D. User permissions

1. What is the term for software enhancements that add new features or functions to a browser?

A. Add-ons

B. Apps

C. Extensions

D. Plug-ons

1. What browser-related program is an additional feature that becomes a part of a browser for functions like viewing specific types of information?

A. Extension

B. Plug-in

C. Attachment

D. Upgrade

1. Before you fill in the data requested by a form on a web page, what indicator should you look for on the browser's address bar?

A. An anchor symbol

B. A heart symbol

C. A padlock symbol

D. A crossed out insect symbol

1. Sheila wants to be able to access her e-mail account using the same client as she uses on her desktop computer. She receives consulting engagement assignments via e-mail and wants to be able to respond as quickly as possible, even when she is away from her office. What process should she use?

A. E-mail forwarding

B. Synchronization

C. Separate e-mail addresses for her desktop and mobile devices

D. Mirroring

1. To change the boot order, which of the following is necessary?

A. Starting Windows in Safe Mode

B. Restarting the system and opening the BIOS/UEFI firmware setup

C. Using the Task Manager

D. Using MSConfig

1. Which of the following is the best way to recover from a bad device driver update?

A. Rolling back the system

B. Restarting the system and opening the BIOS/UEFI firmware setup

C. Rolling back the device driver

D. Restarting in Safe Mode

1. Your client needs to restart a system to solve a problem. Which of the following should be done first?

A. Creating a registry backup

B. Running System Restore

C. Creating a full system backup

D. Unplugging USB drives

1. Your personal computer used to load your Desktop in about ten seconds. Now it takes ten minutes. Which of the following is not a likely cause?

A. Too many tasks running

B. Malware

C. System file corruption

D. User profile corrupted

1. Which of the following is not an option for the WinRE Troubleshooting Advanced Options?

A. System Restore

B. System Image Recovery

C. System Startup Repair

D. Safe Mode Repair

1. 1. A user navigates to her bank's website, which opens with a padlock icon on the address bar. However, as the user navigates through the bank's website, she notices that the padlock icon has changed to an alert symbol. What is likely the cause for this change?

A. Malware has caused the user to open a page without a trustedcertificate.

B. The user is no longer on the home page of the bank.

C. The browser has an issue loading the page.D. There is a problem with the network router.

1. A user's network host computer is unable to contact any address on the Internet. The user sees that an IPv4 address of 169.254.0.1 is assigned to the computer. What could be the problem?

A. The network adapter must be faulty.

B. The gateway router is down.

C. An APIPA address cannot be used beyond a local network.

D. The URL is bad.

1. What is the term for a displayed warning or error message that results from an antivirus program erroneously flagging legitimate and secure software as malware?

A. False flag

B. False alert

C. False negative

D. True negative

1. Which of the following message types would be used to display an alert that warns against the consequences of an action and asks the user to confirm they wish to continue?

A. Confirmation message

B. Information message

C. Warning message

D. Error message

E. Service message

1. A website keeps displaying small pages requesting information that isn't consistent with the site's content. What type of artifact is being displayed?

A. Web page form

B. Pop-up

C. Hypertext link

D. Web survey

1. After updating anti-malware software and using scanning/removal techniques, what is another step that might be necessary in remediation?

A. Educating the user

B. Repairing damage from malware

C. Re-enabling system restore

D. Creating a restore point

1. Which of the following is a reason to use a clean boot environment in removing malware?

A. It makes the computer run faster.

B. It makes user education easier.

C. It prevents reinfection.

D. It helps prevent malware from interfering with removal.

1. When should you enable System Restore and create a restore point?

A. Before removing malware

B. Before scheduling scans and running updates

C. After scheduling scans and running updates

D. As the last step in the process

1. Determining that a system has probably been infected with malware is which step in the malware removal process?

A. Step 7

B. Step 2

C. Step 3

D. Step 1

1. After you have completed the seven-step malware remediation process, Windows will not start properly. What should be your next steps? (Choose two.)

A. Boot into WinPE.

B. Use WinRE.

C. Boot into the anti-malware app.

D. Repeat the seven-step process.

1. Which of the following issues can be helped by performing a soft reset of a mobile device?

A. Extremely short battery life

B. Slow performance

C. Moisture

D. Display too bright

1. Which of the following services, functions, or features can be used to stop an app or service running in background?

A. Kill app

B. Quit app

C. Force stop

D. Cancel app

1. A mobile device app is failing to update. Which of the following conditions could be the cause? (Choose all that apply.)

A. Insufficient storage space

B. Required service is missing

C. Incompatible with device's OS

D. Conflicts with competitor's app already installed

1. A client has brought a smartphone to you requesting help in determining the battery that should be installed in the device. You consider how the user will use the device and the amount of operating time required to come to the amount of power required. How much additional power should be added to your findings to cover the reduction in the power capacity over the battery's lifetime?

A. 10 percent

B. 20 percent

C. 30 percent

D. 50 percent

1. Your tablet PC cannot establish a connection with a Wi-Fi network. You have checked that the network is configured on the device and is within range for a connection. You are puzzled because you were able to make this connection before a recent airline trip. What should be your next action?

A. Check the network adapter configuration

B. Ping the gateway router

C. Disable Airplane mode

D. Reboot the system

1. High resource utilization when no apps are open could be a sign of which of the following?

A. Dying battery

B. Malware

C. Airplane mode

D. GPS enabled

1. A client has discovered what appears to be a very advanced app that performs data analysis on a mobile device, but the APK must be downloaded from an untrusted site using a URL from a foreign country. If the client downloads this file, what action is being used?

A. Phishing

B. Sideloading

C. Jailbreaking

D. Rooting

1. What advanced configuration setting should only be used in the creation of apps and should not be routinely enabled?

A. Root access

B. Sideloading

C. AirDrop

D. Developer mode

1. Jane is experiencing extremely slow performance on her smartphone. She explains that this has just started about a week ago and just after she let her younger brother use her phone while she was busy. She suspects that he downloaded a game from an untrusted site. What tool can she use to verify her suspicions that the game was a Trojan and her phone is infected with malware? (Choose two.)

A. Data usage monitor

B. Anti-malware app

C. Developer mode

D. Troubleshooting app

1. The act of rooting (accessing the root of) a smartphone may have which of the following results?

A. Releasing the actions of a rootkit

B. Voiding the device’s warranty

C. Erasing certain apps

D. Nothing

1. At a minimum, a network topology diagram should record which of the following?

A. Connections between network components such as routers, switches, and WAPs

B. User names and accounts

C. Routing details

D. DHCP address ranges

1. You have been tasked with creating a knowledge base for the Windows-based equipment in your department. Some of the computers were hand-built by a computer shop, and you need to find out the motherboard, chipset, CPU, and RAM information. Which of the following will enable you to find the most information about each system?

A. Contacting the computer shop

B. Dismantling each custom-built PC

C. Running a third-party system information app

D. Viewing the System Properties dialog box

1. Which of the following is not likely to be covered in an acceptable use policy (AUP)?

A. Password handling

B. Keyboard lighting

C. Using e-mail

D. Personal print jobs

1. You are creating an asset tag design for your employer, which plans to use a handheld scanner as part of the company's inventory system. Which of the following must be on the asset tag?

A. Company slogan

B. Manufacturer's serial number

C. Company logo

D. Asset number

1. Which of the following should be in an organization's knowledge base? (Choose two.)

A. Office floorplan

B. Equipment inventory with descriptions and identification details

C. Network topology diagram

D. End-user login credentials

1. A rollback plan is used to perform which of the following tasks?

A. Gaining change board approval

B. Analyzing the effects of changeC. Returning to pre-change conditions

D. Aiding end-user acceptance.

1. Which of the following would be an action in a good change management policy?

A. End users are introduced to a new technology without training.

B. The change board is not consulted during the process.

C. Rumors abound about the reasons for the change.

D. Risk analysis is performed.

1. Six months after a software change was made in a department, you are asked to troubleshoot a problem. The only related information you can locate refers to the old software system.
   Which of the steps in change management was not performed?

A. Document changes

B. End-user acceptance

C. Risk management

D. Plan for change

1. Your organization is proposing a change that will have a big impact on its salespeople in the field. Which of the following steps is most likely to enable the field reps to provide input about the proposed change?

A. Plan for change

B. Risk management

C. End-user acceptance

D. Document changes

1. What individual should be appointed to manage and oversee the implementation plan's activities?

A. Programmer

B. IT manager

C. Change board member

D. Responsible staff member

Answers to Exam Questions

1. C. Review the contents of the service manual.
2. C. TN
3. D. Work on a schedule for replacing laptops with touch-screen versions.
4. C. Laptop 2's USB Type-C port runs at 10Gbps, but you don't know how fast Laptop 1's USB Type-C port is. Recommending Laptop 2 is the safe choice.
5. The correct connector pairing for the Android smartphones is B– B (Type-C connector at both ends). The correct connector pairing for the Apple iPhone is B–D (Type-C to Lightning).
6. B. The desktop computer needs to shut off its Bluetooth radio to enable the Bluetooth device to connect with another device.
7. B. Airplane mode
8. C. HTTPS
9. D. TCP and UDP are both important because they do different jobs.
10. D (reconfigure email client to use IMAP)
11. B (flush the DNS cache)
12. A and D. Load balancer, Proxy server
13. B. SCADA
14. C. The ISP doesn't support IPv6 yet
15. D. The DHCP server has failed
16. C. Virtual LAN
17. B. TXT record
18. A. Using a WISP to set up the connection
19. D. WISP #2, 75Mbps download, unlimited data, $90/month
20. B. Buy 50 1x4GB modules
21. B (use a PoE switch to provide power to cameras), and C (add a hardware firewall to the network between the server and the Internet)
22. B (10/100/1000 Gigabit Ethernet switch), C (DSL modem), and D (access point)
23. C. 802.11n routers are not required to support channels above 11
24. C. Buy a Bluetooth 5.1 adapter
25. B (network tap) and C (Wi-Fi analyzer)
26. A (CAT 6 connectors) and C (TP crimper)
27. B (daisy-chaining displays using DP/mDP)

28. D (replace current cable with CAT6)
29. C. Open up one system of each model and check its configuration.
30. B. 288-pin motherboard with any or all DDR4 modules.
31. System X: Option 2 (SSD SATA 2.5-inch) System Y: Option 4
    (SSD NVMe M.2 System Z: Option 3 (SSD SATA M.2)
32. This question is designed to test your understanding of RAID levels and how RAID array sizes are calculated.

    Option A, 30 drives at 4TB each, works out like this. RAID 0 provides no data security for any systems, so it can be dismissed for all calculations. RAID 1, which uses two identical drives and provides a mirror of one drive to another for data safety, is supported by five systems, so 10 drives are required. RAID 10, supported by five systems, is safer and faster than RAID 1 and requires four identical drives per system. Thus, 20 drives are needed. The total identical drives needed are 30 (10+20). To achieve a RAID array of 4TB in RAID 1, each drive must be 4TB. Four 4TB drives in a RAID 10 array actually create an 8TB array, but that's acceptable.

    Option B, 40 drives at 8TB each, works out this way. There would be 10 unused drives, the RAID 1 array size is 8TB, and the RAID 10 array is 16TB. It exceeds the number of drives and the array size needed, so it's more expensive than needed.

    Option C, 30 drives at 2TB each, calculates out this way. The number of drives provides enough for each array. However, the RAID 1 arrays are only 2TB, and the RAID 10 arrays are 4TB. The RAID 10 arrays meet the specifications, but not the RAID 1 arrays.

    Option D, 20 drives at 3TB each, doesn't include enough drives to take care of both the RAID 1 and RAID 10

systems. If the drives were used only for RAID 10 arrays, each array would be 6TB, but if 10 more drives were purchased to provide enough drives for the RAID 1 systems, the RAID 1 arrays would be only 3TB each.

Correct Answer: A. 30 drives, 4TB each

1. D. These parts must be used in separate PCs
2. C. Use the PCIe ×8 slot for the x4 card.
3. C. Override boot order J
4. A (TPM version installed on some systems is TPM 1.2), B (TPM was not enabled on some systems), D (Secure Boot is not enabled on some systems)
5. B. 70Amp 12V, $99
6. D. Figure D: PCIe power cable
7. C, Install the software provided by the vendor
8. B, Quality, and D, Paper type
9. D. The fuser is the cause of the problem. Its job is to melt the toner to the paper. If it fails, the toner stays on the paper but will fall off when the paper is picked up, or even blow off the paper if there's any air movement by the printer.
10. 2, 4, 5. Inkjet printer, 3-D printer, Thermal printer
11. C. IaaS
12. B. File synchronization
13. C. Six-core, 12-thread 3.7GHz CPU with 64GB RAM, 8TB RAID 1 on Wi-Fi 6
14. D. VT-x
15. A. Document your findings
16. D. Establish a theory
17. C. Clogged air intakes
18. B. Power supply fan
19. D. Capture all error messages from the operating system or RAID array
20. B. Install the drive vendor's diagnostics utility and run it regularly.
21. D. The new laptop is using a different type of video cable.
22. A. An eight-pin PCIe power cable
23. C. The phone should be dried out immediately.
24. B. Tablet PC Settings 25. B. Listen to the printer.
26. A. Are all printouts affected or only printouts made when copying?
27. D, Repair the fluorescent light fixture

28. C, DHCP
29. B, Windows requires a Microsoft signed device driver for all installed devices.
30. C, Windows Home 64-bit edition supports only 128 GB of RAM.
31. A, A domain is a logical grouping of network servers, nodes, and resources.
32. D, The Home edition cannot create settings for multiple computers through the Active Directory.
33. C, The in-place upgrade process is used to apply new features to a supported Windows edition.
34. C, The sfc command verifies system files, folders, and paths and replaces corrupt versions.
35. B, The diskpart command has an option (clean all) to remove all contents from a connected drive.
36. D, The ipconfig command can display various amounts of information about the user's network connection, depending on which options are used.
37. C, You can use either the IP address or the URL with ping. However, the syntax must be correct.
38. D, The command cd foldername drops the focus of the command prompt down one level, and Miranda is in the next level below the Users folder
39. A, B. These two commands can be run from a command prompt to execute or kill a task.
40. D, The Event Viewer cannot anticipate events that may occur.
41. A, The User Configuration section over which the Computer Configuration section takes precedence.
42. A, The Device Manager should be used to investigate device issues.
43. B, The Registry key for the configuration and settings for the current user is HKEY_CURRENT_USER.
44. D, Internet Options is used to configure the Internet security zone.
45. C, The Network and Sharing Center is used to access the media streaming settings.
46. A, The Devices and Printers option is used for centralized viewing and management of monitors, printers, and peripheral devices.
47. B, The Control Panel provides tools and services to access and control the system settings and features.
48. D, From the Category view of the Control Panel, power settings are accessed through the System and Security category.
49. D, Windows will make suggestions or provide hints, but it doesn't make judgments.
50. B, The background tint is not a setting of the Display settings.
51. C, The settings for these devices are on the System section of the Settings app.

52. A, The Diagnostics & Feedback settings are in the Privacy section of the Settings app.
53. D, The settings for the Windows Lock screen are found on the Personalization section of the Settings app.
54. C, With the IP address of the printer, the user can find and set up the printer using Devices and Printers.
55. B, When Windows Firewall is set to Public, connections to LAN devices are blocked for security.
56. D, On most SOHO networks, the DHCP server that provides automatic IP addresses is a function built into the router. Thus, the router is the first device to check.
57. C, The network firewall rules may be denying the source IP address, the document type, or some other characteristic of the missing document.
58. A, It appears that an APIPA address was assigned automatically when a DHCP request failed.
59. D, A 32-bit app will work on 32-bit and 64-bit operating systems, but you cannot install a 64-bit app on a 32-bit operating system.
60. B, If you wait to install the app until you go to the airport or while onboard the plane, you might not have access to an Internet connection or might need to pay a lot for a connection (which might be very slow) to download and configure the software.
61. C, By upgrading some systems to 8 GB and running the app on all systems, you can determine if the performance difference between systems with 4 GB and 8 GB of RAM justifies upgrading all computers in the department.
62. C, The Compatibility tab in the application's Properties dialog box provides access to the Program Compatibility Troubleshooter and to compatibility settings you can select manually.
63. B, While all of the methods listed have one or more faults, using an external hardware token may be the easiest method for employees to work with, although there is still the issue of the token being lost.
64. B, A business operating system is better suited for the needs of workstations on larger networks.
65. A, Any of the choices could be the answer, but if you are attempting to be compatible with other users or systems, your best bet is likely Windows.
66. C, macOS is based on the UNIX OS.
67. B, C, Android and iOS are the most popular OSs for mobile devices. Windows Mobile has been deprecated, and there isn't a Linux Mobile product.
68. B, D, The two file systems most common on Linux OSs are ext3 and ext4.
69. C, it's always a good practice to back up user files and settings before proceeding with an installation or upgrade of any kind.

70. B, A network boot configuration requires, among other components, a PXE network adapter.
71. A, An image is a copy of an existing installation saved as one file.
72. A, An MBR partition has tangible limits of 2.2 TB and not more than four partitions.
73. C, A logical partition is assigned a drive letter.
74. A, Spotlight is the macOS search and indexing tool.
75. B, Force Quit is used to stop unresponsive apps.
76. A, Time Machine is the backup app for macOS.
77. D, One of the tools available to create scripts in macOS is launchd.
78. C, Passwords and login credentials from websites, e-mail accounts, and applications are saved to Keychain Access.
79. C, Many Linux commands must be run as the root user (superuser) with sudo.
80. B, The ps command lists active processes and their PIDs.
81. B, The cron command is used to control the start of a script using the time of day, day of the week, and so on.
82. C, The df command displays the amount of free disk space in 1K blocks available on a Linux system.
83. C, Samba is used to connect a Linux system with a Windows system for interactions.
84. B, A security guard is helpful in making an access control vestibule (or mantrap) more effective and to maintain the entry control roster.
85. D, A USB lock prevents unused USB ports from being "borrowed" for data theft.
86. A, Different types of badge readers use these technologies.
87. C, The cable lock connector was developed by Kensington, hence the name.
88. C, Mobile device management (MDM) is software used to manage and control mobile devices that connect to a network.
89. C, This is single-factor authentication because the user name and password together are considered to be a single knowledge factor.
90. A, WPA3 replaced PSK with SAE.
91. C, Kerberos is used to authenticate web requests over the Internet and Web.
92. B, This is multifactor authentication because the user name/password combo is one factor (knowledge) and the code is the second factor (possession).
93. A, C, AES encryption offers 128-, 192-, and 256-bit encryption and is by far the strongest wireless encryption standard.
94. D, A ransomware attack combines file encryption and a demand for payment of a ransom before the files will be decrypted.
95. C, Instructing users in how to avoid e-mail traps is an example of end-user education.

96. D, User training and education should be the first line of defense and first-level priority to protect an organization from malware and social engineering attacks.
97. B, One sign of the presence of a cryptominer is an increase in electrical power use.
98. D, All of these OSs, plus Linux and iOS, provide a recovery mode of one form or another
99. A, A distributed denial of service (DDoS) attack comes from multiple locations, seeking to overwhelm a network resource so it can't respond.
100. B, The use of a false sender on the e-mail makes this an example of spoofing.
101. A, Dumpster diving involves taking discarded information from any location, not just a dumpster.
102. C, A zero-day attack takes place before or immediately after the software vendor discovers or has been provided knowledge of a vulnerability. It's called zero-day because the vendor has had zero days to patch the vulnerability.
103. D, A dictionary attack uses a list of possible matches for passwords. Since many users who create their own passwords often recycle old passwords in whole or in part, a list of old passwords can be very useful in the hands of an attacker.
104. C, A Microsoft account, while not universal, can be used to log in to most Microsoft applications and services.
105. D, BitLocker is not installed with the Windows 10/11 Home editions. The user can upgrade to another Windows edition or purchase BitLocker directly from the Microsoft Store.
106. E, At the present time, Spoken Passwords aren't available as a sign-in option.
107. B, Single sign-on (SSO) authenticates a user over multiple applications.
108. A, This option sets the UAC to always display a notification for any changes, including trusted Windows settings.
109. B, The strongest passwords use a mixture of upper- and lowercase letters, numbers, and symbols without recognized words.
110. A, Account Lockout Policy prevents login attempts after a specified number of incorrect logins.
111. C, AutoPlay is the feature that opens an app or lists a choice of apps based on the contents of the removable media.
112. A, The Enforce Password History value sets the number of password changes that must occur before a password can be reused.
113. D, Data stored on any form of media is considered to be "at rest."
114. A, C, Remote wipe could wipe out the device's contents after it was determined to be lost or stolen; device encryption (a manual process on many devices) could prevent the device's contents from being accessed.

115. B, If the option to wipe data after ten unsuccessful logins has been enabled in Settings | Passcode, the user is very close to losing his data, which is hopefully backed up to iCloud.
116. D, Who owns company data on a BYOD device is an important issue in a BYOD policy.
117. A, Facial recognition locks compare a previously captured image to a realtime image.
118. A, The operations and communications of an IoT device are controlled by embedded devices, which typically include a microprocessor, operating system, and a network adapter.
119. A, Drilling through the memory chip(s) will render the contents unrecoverable.
120. B, A certificate of destruction from a third-party data destruction facility is what you need; the facility will decide the best methods and tools to use.
121. C, Drive wiping would be the biggest concern.
122. C, Formatting doesn't remove or overwrite data, so it is no substitute for drive wiping.
123. D, Degaussing is the only suitable method of those listed for destroying data on magnetic tape.
124. A, B, D These settings are not only standard to the devices but are publicly shared by the manufacturers.
125. A, Using a web browser is the standard method for configuring and managing a router's settings.
126. A, Port forwarding/mapping enables you to open a port in the firewall and direct incoming traffic on that port to a specific IP address on your LAN.
127. D, A screened subnet does not include the role of WAN router.
128. B, IP filtering blocks incoming or outgoing messages based on their source and destination addresses.
129. A, B, It's safe to assume that the software obtained from what is obviously an untrusted site contained malware.
130. C, An extension adds a function to a browser that is executed externally to the browser itself.
131. B, A plug-in executes within the browser as an additional feature.
132. C, A padlock symbol on the address bar indicates a site is trusted.
133. B, Synchronization establishes a link between devices and apps to keep data up to date on the synched devices.
134. B, You must use the BIOS/UEFI firmware dialog box to change the boot order.
135. C, Rolling back the device driver will not affect other parts of the system, so it is the preferred method.
136. D, USB drives that are plugged in could prevent the system from restarting.

137. A, The other items listed are likely causes; the number of tasks running has a small impact on load time, but not as much impact as the others.
138. D, Safe Mode Repair is not a WinRE troubleshooting advanced option.
139. A, Malware has caused the user to open a page without a trusted certificate.
140. C, An APIPA address cannot be used beyond a local network.
141. B, A false alert occurs when malware erroneously identifies valid data or files as bad.
142. C, A warning message seeks confirmation that the user wishes to proceed.
143. B, Pop-ups are typically displayed by malware that has infected a web page.
144. B, Software can be damaged by malware, so repairing it may be a part of remediation on some systems.
145. D, Clean booting or booting from a USB or optical disc before running malware removal helps prevent malware from running and interfering with the removal process.
146. C, The restore point needs to remember the system configuration after it has been remediated and protected against threats.
147. D, Determining that a malware infection is present is included in Step 1: Investigate and verify malware symptoms.
148. A, B, Boot into the Windows Preinstallation Environment (WinPE) and use the Windows Recovery Environment (WinRE) tools to recover the system.
149. B, The performance of a mobile device may be improved by a system reset.
150. C, A force stop stops an app and any supporting services.
151. A, B, C, Any or all of these conditions could be the issue.
152. B, But more may be better in certain instances.
153. C, Most likely the Airplane mode is still enabled.
154. B, Malware can use a lot of resources because it captures and sends data without the user's permission or knowledge.
155. B, Sideloading occurs when a system file is loaded from an untrusted site.
156. D, Developer mode opens several apps and files not usually available to a standard user.
157. A, B, These tools can be used to detect and profile the actions of a malware infection.
158. B, Rooting can void a device's warranty.
159. A, A network topology diagram must record the network's physical layout. The other items are desirable to know but not essential.
160. C, A third-party system information app can provide much more information than the System Properties dialog box in Windows.

161. B, Keyboard lighting is a feature found mainly on gaming keyboards and some laptops and won't affect typical operations covered in an AUP.
162. D, The asset must be identified with a unique asset identification number.
163. B, C, The network diagram and the installed equipment information are considered key operational knowledge.
164. C, A rollback (backout) plan is designed to help an organization return to pre-change conditions if a change has an adverse impact.
165. D, Risk analysis is a necessary part of change management. The other choices, not so much.
166. A, Without documenting changes, the knowledge of what has changed will fade over time
167. C, End users and other stakeholders must have the opportunity to review proposed changes and how they may affect their tasks.
168. D, A responsible staff member should be appointed to oversee the implementation.

Exam Day Tips

W

alking into the exam center, your heartbeat might be a tad faster, and your palms slightly sweaty; it's a common experience, but this chapter aims to give you the composure and focus you need to excel. We've covered an extensive amount of material, from network topologies to disaster recovery, but this chapter focuses solely on the practical aspects of the day that will decide your certification fate.

The first order of business is to have a clear understanding of the exam location and logistics. While this may seem rudimentary, you would be surprised how many candidates misjudge travel time or get lost on the way to the testing center. A prior visit to the center a few days before the exam can significantly reduce any unexpected hiccups. Get to know the area, the traffic conditions, and even the parking availability. On the day of the exam, aim to arrive at least 30 minutes early. This gives you enough time to adjust to the environment, complete necessary check-ins, and even review some last-minute notes.

When it comes to your mental state, a well-rested mind is crucial for peak performance. Lack of sleep can impact your cognitive functions, reduce your focus, and make you prone to mistakes. Therefore, try to get a good night's sleep before the exam day and resist the urge to do any last-minute cramming. Relax, unwind, and trust the preparation you've put in. Confidence, not overconfidence, is key.

As for what to bring to the exam, most centers will require two forms of identification. Usually, one of them has to be a governmentissued ID with a photograph. Read through all the exam guidelines beforehand to ensure you are not missing any essentials. You'll also be provided a small locker to store personal items, as you usually can't bring anything into the exam room itself. Ensure your mobile phones are turned off and stored securely to avoid any disruptions.

You can expect the CompTIA Network+ exam to include multiplechoice questions, drag-and-drop activities, and performance-based questions. Time management is paramount. While it's easy to get stuck on a complex question, it's essential to move on if it's taking too much time. Flag the question for review and return to it after completing the rest of the exam. Remember, not answering a question guarantees zero points, so it’s better to take an educated guess if you're uncertain.

When seated at the exam terminal, take a few deep breaths to center yourself. This is the moment where you need to draw upon all the knowledge and skills you've developed. Remember, you've prepared extensively for this. Your readiness isn't just a result of the weeks or months leading up to this day but is the culmination of your educational and professional journey to date.

Lastly, after completing the exam, you will be prompted to review your flagged questions. Use this opportunity wisely but also know that second-guessing yourself can be counterproductive. If you studied well and followed this guide, your first instinct is usually the correct one.

After submitting the exam, you'll receive a preliminary score immediately, and while the wait for the official results can be nervewracking, take this time to unwind and decompress. Whether you pass or need to retake the exam, remember that this is a learning experience, and each attempt brings you closer to becoming a certified Network+ professional.

In conclusion, the day of your CompTIA Network+ exam will likely be filled with a blend of anxiety and excitement. However, your diligent preparation combined with these exam day tips can make the difference between certification and having to retake the exam. Good luck, and may your knowledge and skills carry you through to a successful and rewarding career in networking.

Conclusion

A

s we close the final chapter of this comprehensive guide aimed at propelling you toward success in the CompTIA Network+ exam, it's important to reflect on the transformative journey we've embarked upon together. Through various sections, we've dissected the realms of networking, from its most basic building blocks to the complex fabric that holds modern enterprises together. But acquiring this knowledge is not an endpoint; rather, it's the genesis of a careerlong journey in the ever-evolving field of networking.

Achieving the CompTIA Network+ certification isn't merely a validation of your skills for the current job market; it's an investment in your professional future. The networking landscape is continually reshaped by emerging technologies and evolving security threats, and this certification equips you with the foundational knowledge you need to adapt and grow. It opens doors for further specialization, whether in security, cloud computing, or network design, and serves as a launchpad for vendor-specific certifications that can further elevate your career.

Speaking of career trajectories, let's not overlook the vital aspect of continual learning. The field of networking is not static. The pace at which new technologies, standards, and protocols are introduced necessitates an attitude of perpetual learning. Subscriptions to industry journals, participation in online forums, and ongoing training are not luxuries; they are necessities for staying relevant. Therefore, consider this book not as an ending but as a stepping stone to more advanced topics and deeper understanding.

Exam day will soon arrive, and when it does, remember that your best ally is your state of mind. Stress and anxiety are natural but counterproductive. You've prepared rigorously and are well-equipped to face the challenges of the CompTIA Network+ exam. Confidence, born from your meticulous preparation, will be your strongest asset. Go through the questions methodically, utilize your time wisely, and rely on your acquired knowledge and skills.

One often overlooked aspect of career development is networking— not in the technical sense, but in the interpersonal one. No matter how advanced or secure a network is, it is ultimately designed, maintained, and managed by people. Attending industry conferences, engaging with mentors, and even participating in online networking groups can provide invaluable opportunities for career growth. A well-placed recommendation can sometimes be more effective than a well-configured router in advancing your career.

Finally, let's consider the essence of what it means to be a Network+ certified professional. You're not just a technician or an administrator; you're a problem solver, a gatekeeper of information, and a facilitator of communication. You have the responsibility to uphold the integrity, availability, and confidentiality of your organization's network. It's a significant

role that has ripple effects across all departments of an organization, and now, you are fully prepared to take on that role.

In conclusion, while this guide has provided you with the tools and knowledge to pass the CompTIA Network+ exam, the ultimate key to success lies within you: your dedication, your curiosity, and your relentless pursuit of excellence. Certification is a milestone, not a destination. Welcome to the dynamic, challenging, and rewarding world of networking.